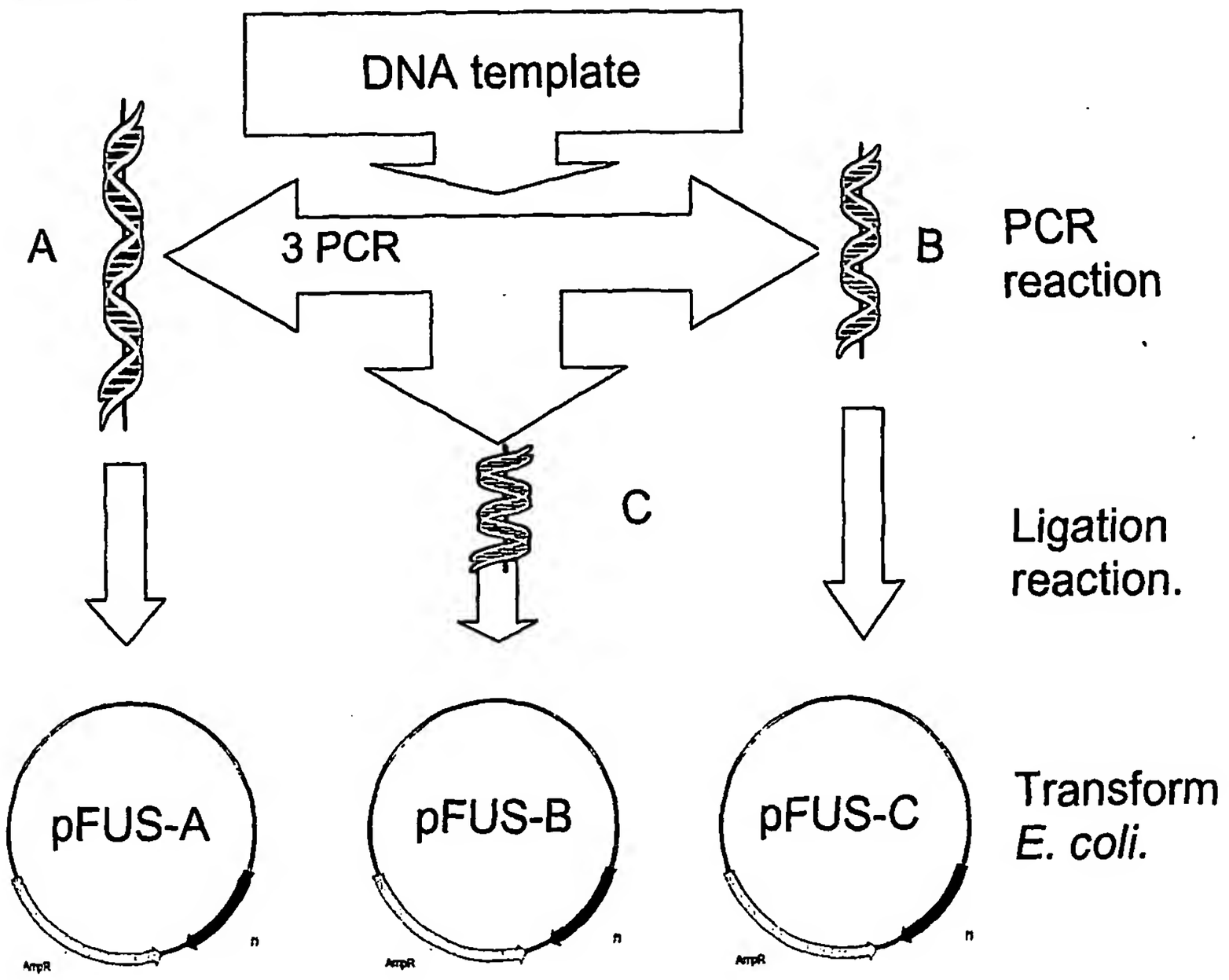
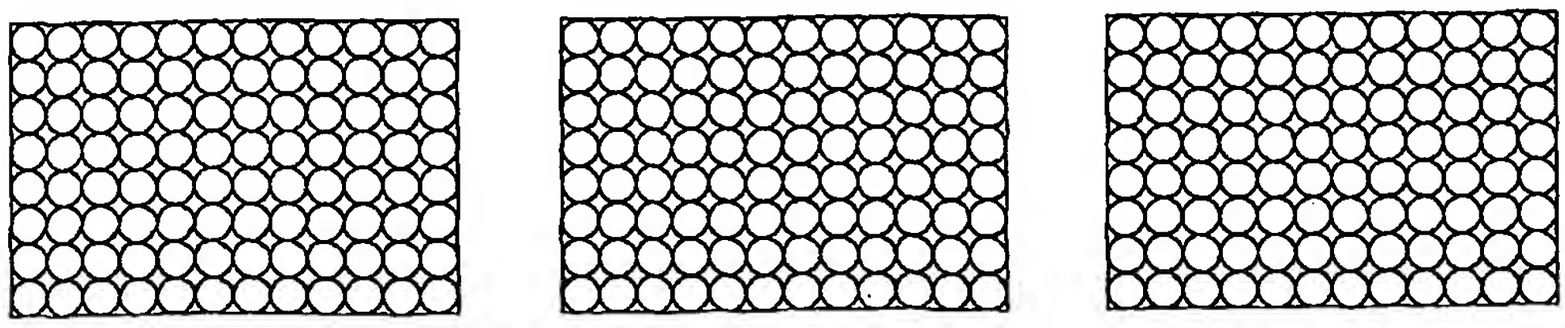
Figure 1



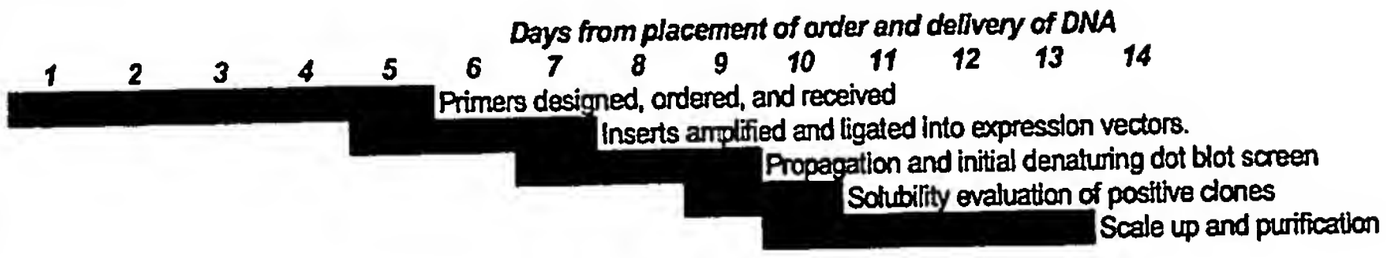
Each target insert is ligated into various vectors and transformed into hosts eg *E coli*. Typically, at least 3 inserts are designed for each target protein, each of which is ligated into 4 vectors on separate transformant plates. 24 clones from each transformant plate (i.e. total of 288 clones) are then propagated.



Flow chart of the fusion antibodies high-throughput process

Figure 2

Timetable for Production of Protein



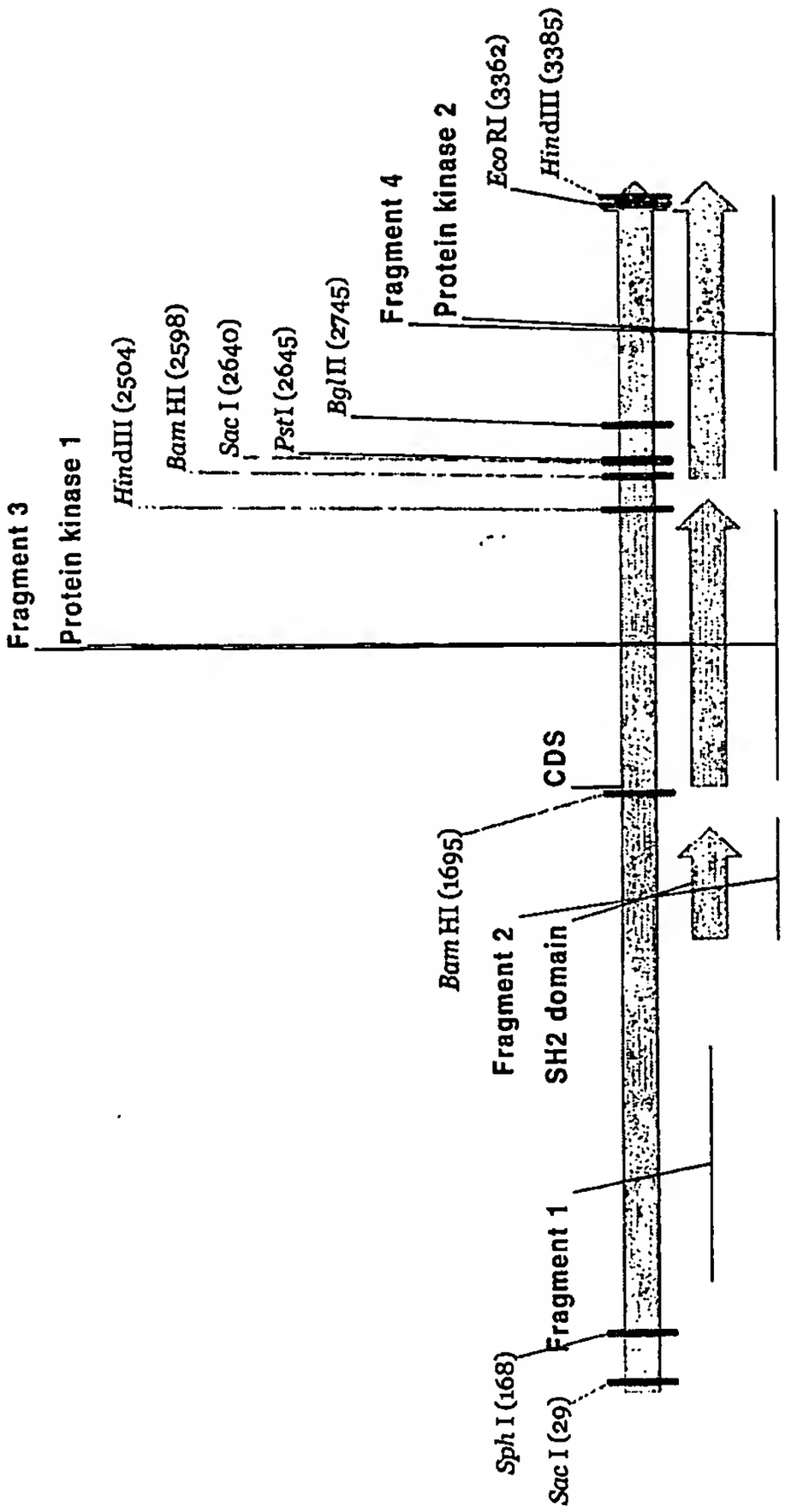

EcoRI (3362)
HindIII (3385)
Fragment 4
Protein kinase 2
HindIII (2504)
BamHI (2598)
SacI (2640)
PstI (2645)
BglII (2745)
Fragment 3
Protein kinase 1
BamHI (1695)
CDS
Fragment 2
SH2 domain
Fragment 1
SphI (168)
SacI (29)
JAK1
3429 bp

Figure 3

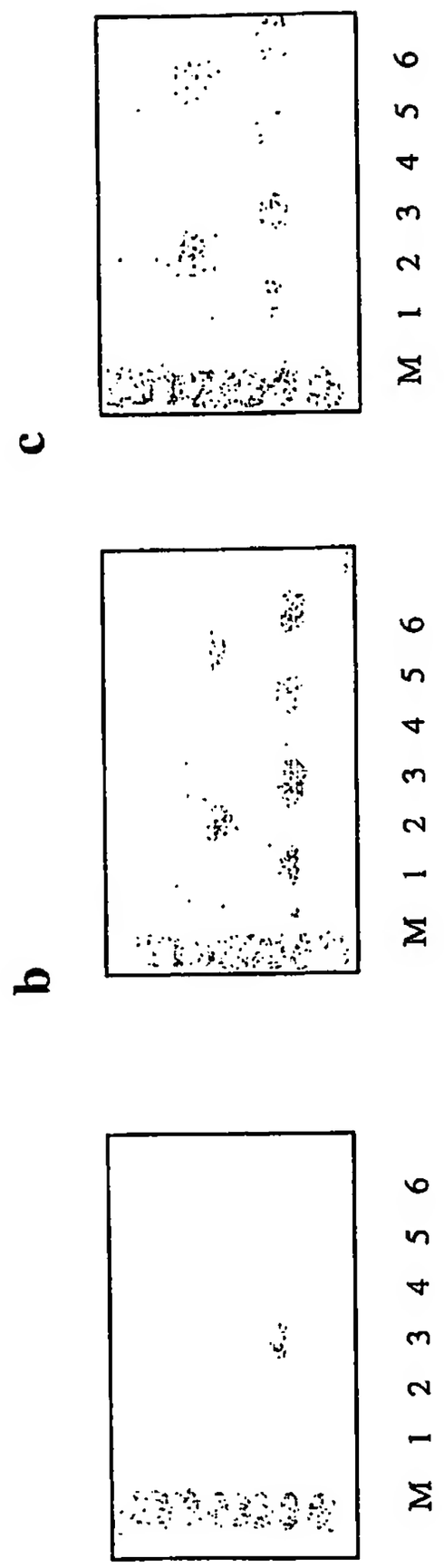


Figure 4

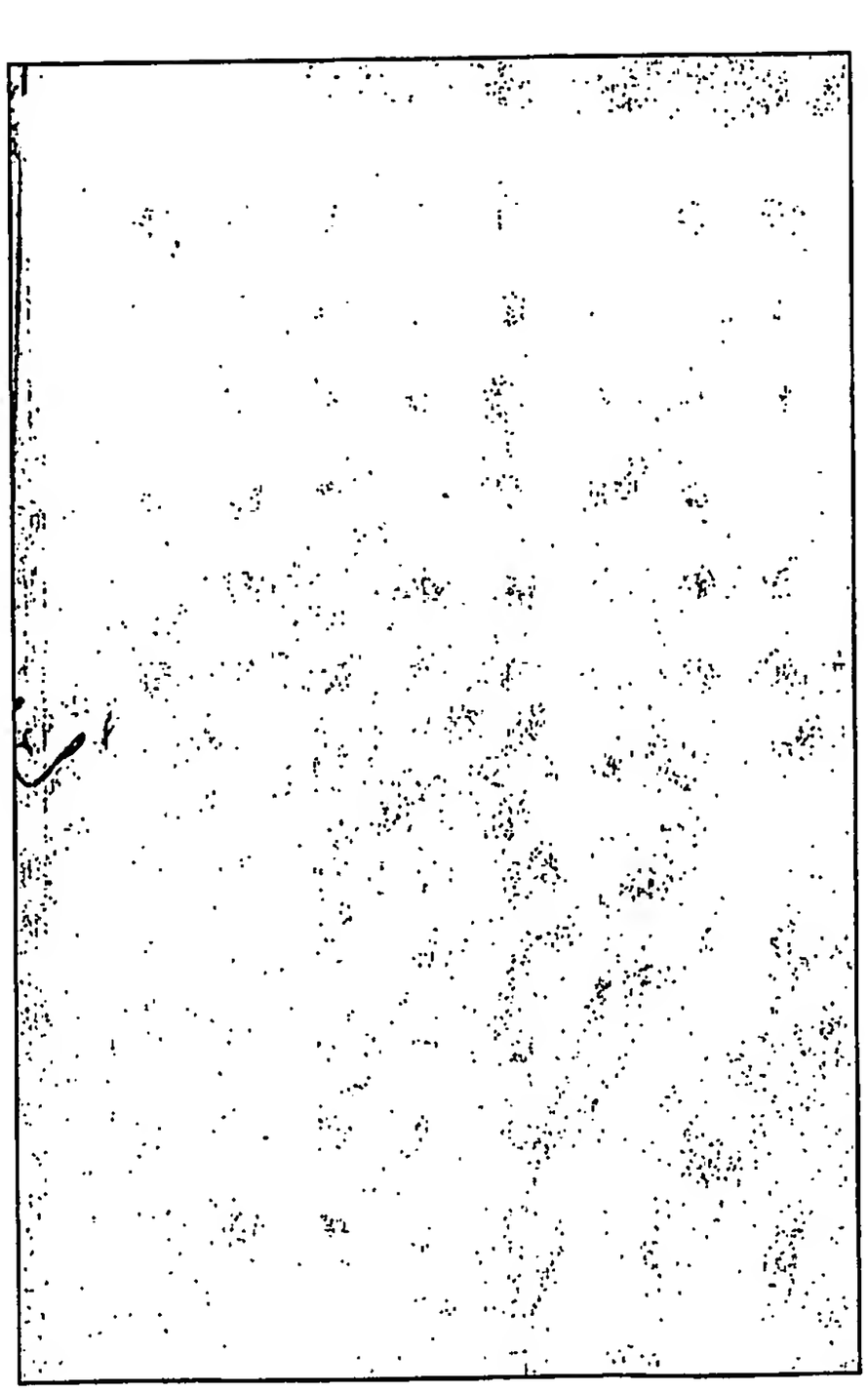


Figure 5

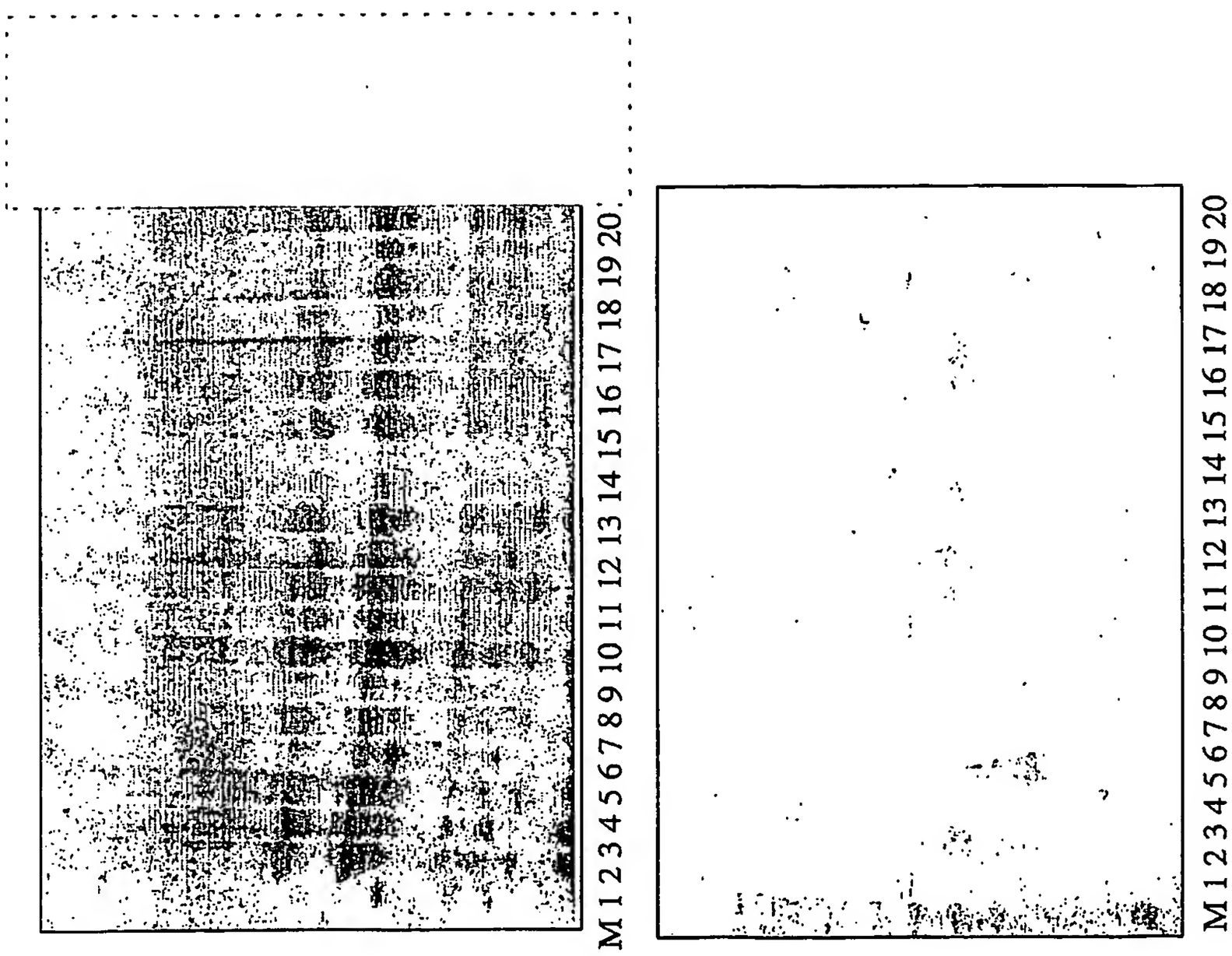

M 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
M 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Figure 6 a b

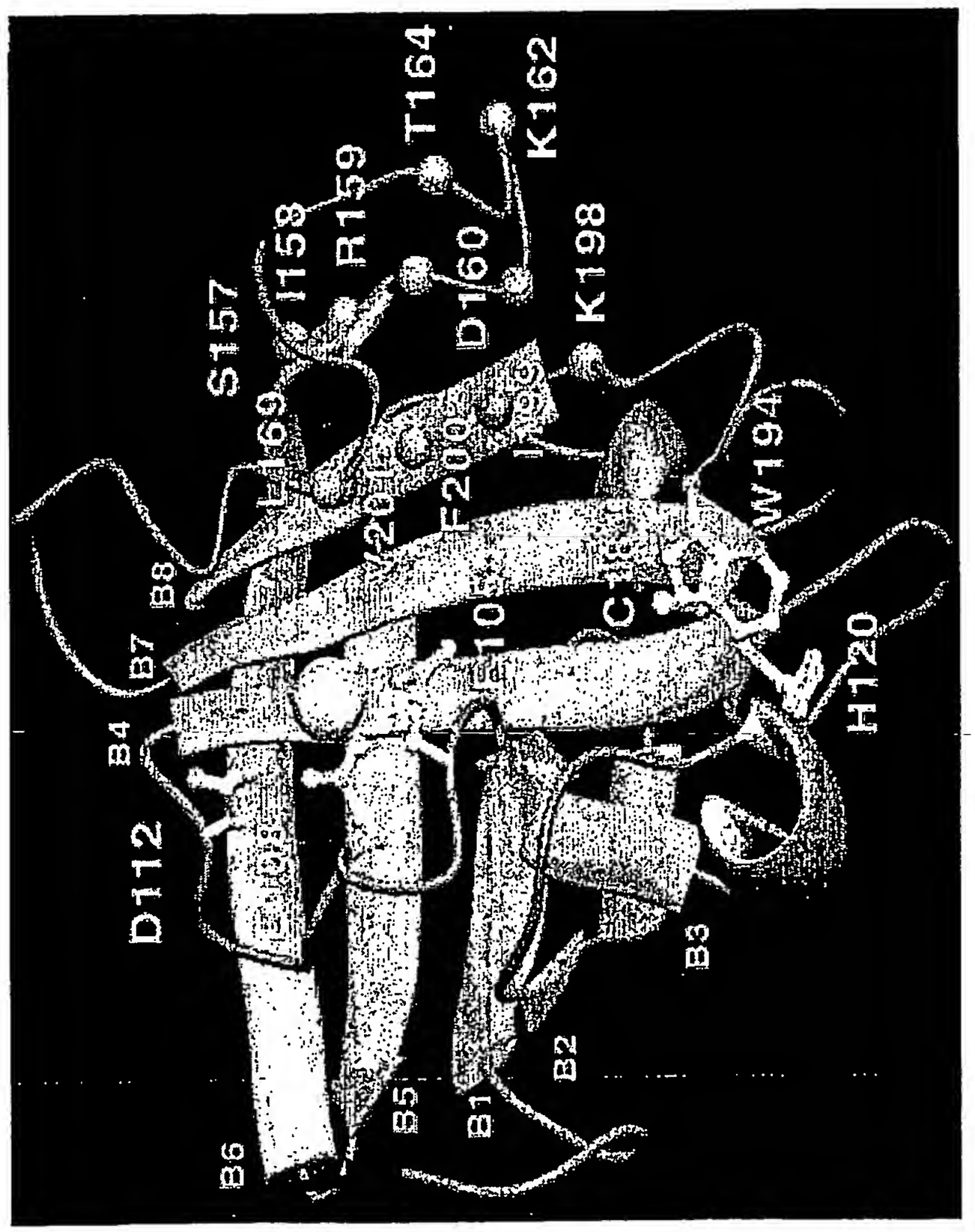


Figure 7

Figure 8a

a

```
ATGAGAGGATCGCATCACCATCACCATCACGGATCTAAACCACATATCGATAATTATCTT     60
TACTCTCCTAGCGTAGTGGTAGTGGTAGTGCCTAGATTTGGTGTATAGCTATTAATAGAA
M  R  G  S  H  H  H  H  H  H  G  S  K  P  H  I  D  N  Y  L

CACGATAAAGATAAAGATGAAAGGATTGAACAATATGATAAAAATGTAAAAGAACAGGCG    120
GTGCTATTTCTATTTCTACTTTCCTAACTTGTTATACTATTTTTACATTTTCTTGTCCGC
H  D  K  D  K  D  E  R  I  E  Q  Y  D  K  N  V  K  E  Q  A

AGTAAGGATAAAAAGCAGCAAGCTAAACCTCAAATTCCGAAAGATAAATCGAAAGTGGCA    180
TCATTCCTATTTTTCGTCGTTCGATTTGGAGTTTAAGGCTTTCTATTTAGCTTTCACCGT
S  K  D  K  K  Q  Q  A  K  P  Q  I  P  K  D  K  S  K  V  A

GGCTATATTGAAATTCCAGATGCTGATATTAAAGAACCAGTATATCCAGGACCAGCAACA    240
CCGATATAACTTTAAGGTCTACGACTATAATTTCTTGGTCATATAGGTCCTGGTCGTTGT
G  Y  I  E  I  P  D  A  D  I  K  E  P  V  Y  P  G  P  A  T

CCTGAACAATTAAATAGAGGTGTAAGCTTTGCAGAAGAAAATGAATCACTAGATGATCAA    300
GGACTTGTTAATTTATCTCCACATTCGAAACGTCTTCTTTTACTTAGTGATCTACTAGTT
P  E  Q  L  N  R  G  V  S  F  A  E  E  N  E  S  L  D  D  Q

AATATTTCAATTGCAGGACACACTTTCATTGACCGTCCGAACTATCAATTTACAAATCTT    360
TTATAAAGTTAACGTCCTGTGTGAAAGTAACTGGCAGGCTTGATAGTTAAATGTTTAGAA
N  I  S  I  A  G  H  T  F  I  D  R  P  N  Y  Q  F  T  N  L

AAAGCAGCCAAAAAAGGTAGTATGGTGTACTTTAAAGTTGGTAATGAAACACGTAAGTAT    420
TTTCGTCGGTTTTTTCCATCATACCACATGAAATTTCAACCATTACTTTGTGCATTCATA
K  A  A  K  K  G  S  M  V  Y  F  K  V  G  N  E  T  R  K  Y

AAAATGACAAGTATAAGAGATGTTAAGCCTACAGATGTAGAAGTTCTAGATGGATCCGCA    480
TTTTACTGTTCATATTCTCTACAATTCGGATGTCTACATCTTCAAGATCTACCTAGGCGT
K  M  T  S  I  R  D  V  K  P  T  D  V  E  V  L  D  G  S  A

TGCGAGCTCGGTACCCCGGGTCGACCTGCAGCCAAGCTTAATTAG    525
ACGCTCGAGCCATGGGGCCCAGCTGGACGTCGGTTCGAATTAATC
C  E  L  G  T  P  G  R  P  A  A  K  L  N  *
```

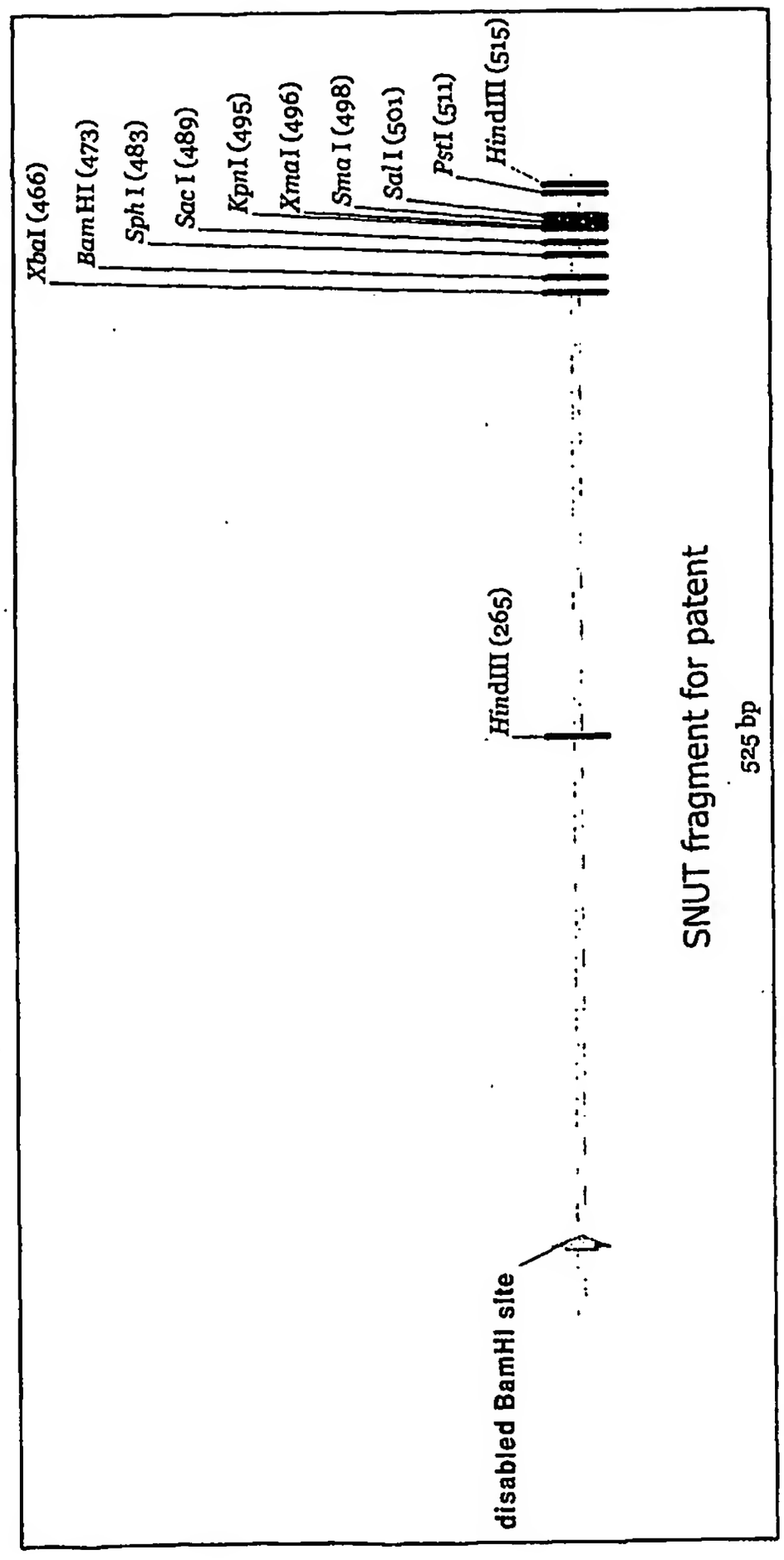

XbaI (466)
BamHI (473)
SphI (483)
SacI (489)
KpnI (495)
XmaI (496)
SmaI (498)
SalI (501)
PstI (511)
HindIII (515)
HindIII (265)
SNUT fragment for patent
525 bp
disabled BamHI site

Figure 8b

b

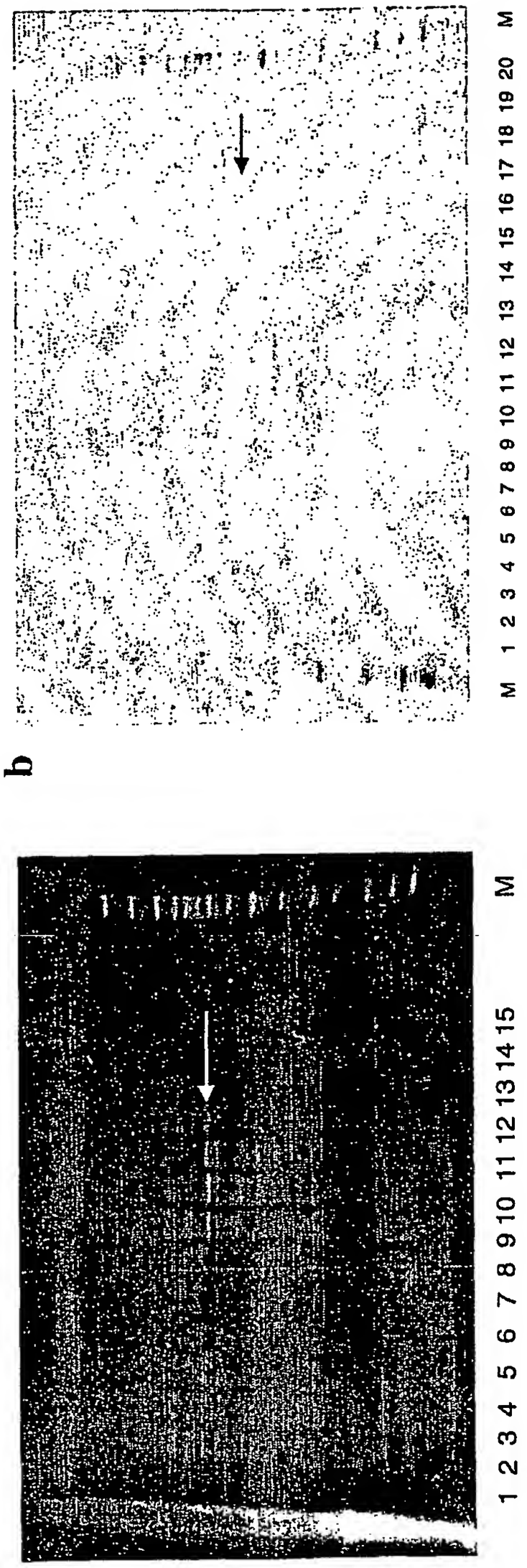

a
M 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
b
M 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 M
c
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Figure 9